

OROVILLE DAM CITIZENS ADVISORY COMMISSION

Hosted by the California Natural Resources Agency



ROLL CALL

- Lieutenant Collins
- Supervisor Connelly
- Supervisor Conant
- Secretary Crowfoot
- Deputy Director Curry
- Supervisor Flores
- Supervisor Fuhrer
- Assemblyman Gallagher
- Supervisor Kimmelshue
- Deputy Licon
- Captain Million
- Director Nemeth
- Senator Nielsen
- Councilmember Pittman
- Mayor Reynolds
- Lieutenant Stokes
- Superintendent Teague
- Supervisor Vasquez
- Genoa Widener

ITEM 1

WELCOME AND INTRODUCTIONS

ITEM 2

ACTION ITEMS & ROADMAPS

Commission Action Items Tracker

	Item	Meeting	Status
1	Tour of Joint Operations Center (State-Federal Flood Operations Center in Sacramento)	Mtg 2 11/2019	On hold due to Covid-19. Aiming for Q2 2022.
2	Report out how instrumentation performed and was managed during winter operations	Mtg 2 11/2019	Ongoing.
3	Invite State Water Contractors to future meeting(s)	Mtg 2 11/2019	On track. Participating at Q3 2021 meeting.
4	Provide regular updates and milestones developments from DWR on Forecast-Informed Reservoir Operations (FIRO) as well as Oroville and New Bullards Bar water control manual processes	Mtg 3 02/2020	On track. Update planned for Q4 2021 meeting.
5	Follow-up on the status of the Federal Energy Regulatory Commission (FERC) relicensing	Mtg 3 02/2020	Ongoing. Anticipate early 2022 update.

Commission Action Items Tracker

	Item	Meeting	Status
6	Follow-up on the status of Federal Emergency Management Agency (FEMA) reimbursement for spillway reconstruction	Mtg 3 02/2020	Ongoing.
7	Discussion to help state agencies and local partners address homelessness concern around Feather River	Mtg 3 02/2020	For future Commission consideration.
8	CalOES follow up with CalTrans on the status of their post-fire mitigation along County highways	Mtg 5 11/2020	Done. Work confirmed complete.
9	DWR updates on debris and storm inflows	Mtg 5 11/2020	DWR monitoring, will notify Commission as needed.
10	DWR follow-up re: Hyatt Power Plant	Mtg 5 11/2020	Done. Update provided at Q2 2021 meeting.

Commission Action Items Tracker

	Item	Meeting	Status
11	Offer new Commissioners an orientation.	Mtg 6 2/19/21	Done.
12	Post additional contact information on OCAC website.	Mtg 6 2/19/21	Done. Contact e-mail and phone # are available on Commission website.
13	Agendize discussion on lessons learned from 1986 and 1987 water events.	Mtg 6 2/19/21	On track. Update planned for Q4 2021.
14	State Parks to provide information on investments related to fuel and vegetation management.	Mtg 7 5/28/21	Done. Shared with community member.
15	DWR to respond to Commissioner question regarding what constitutes “failure”	Mtg 7 5/28/21	Ongoing. Response shared in writing. Ongoing Commission dialogue on the topic.

Commission Action Items Tracker

	Item	Meeting	Status
16	Request to develop single tracking log cataloging ongoing or future safety projects	Mtg 7 5/28/21	On track.
17	Continue to discuss Risk Assessment and hear from outside experts	Mtg 7 5/28/21	Ongoing.

Commission Roadmap

Public Meeting: Q4 (December 3, 2021) Operations

Topics

Oroville Dam Facility Operations

- Winter Operations Plan
- Downstream flood management and preparedness
- U.S. Army Corp of Engineers (water control manual update)

Status Updates

Commission Report
Wildfire Season Update

Public Meeting: Q1 (TBD 2022) Partnerships

Topics

Dam Facility Partnerships

- FERC Relicensing
- Recreation Partnerships
- Public Safety Partnerships

Status Updates

Commission Report

Commission Roadmap

Commissioner Tour: Q2 (2022) Commissioner Joint Ops Center – Sacramento

Topics

Status Updates

Joint Operations Center

N/A

- Tour of Joint Operations Center
- Overview of Joint Ops and Flood Ops
- 2017 Lessons Learned and Current Procedures

Public Meeting: Q3 (TBD 2022) Safety

Topics

Status Updates

Dam Facilities Safety

Commission Report

- Recap of Joint Operations Tour
- Commission Report – Draft review

Public Meeting: Q4 (TBD 2022)

Topics

Status Updates

- Finalize Commission Report
- TBD

Commission Report

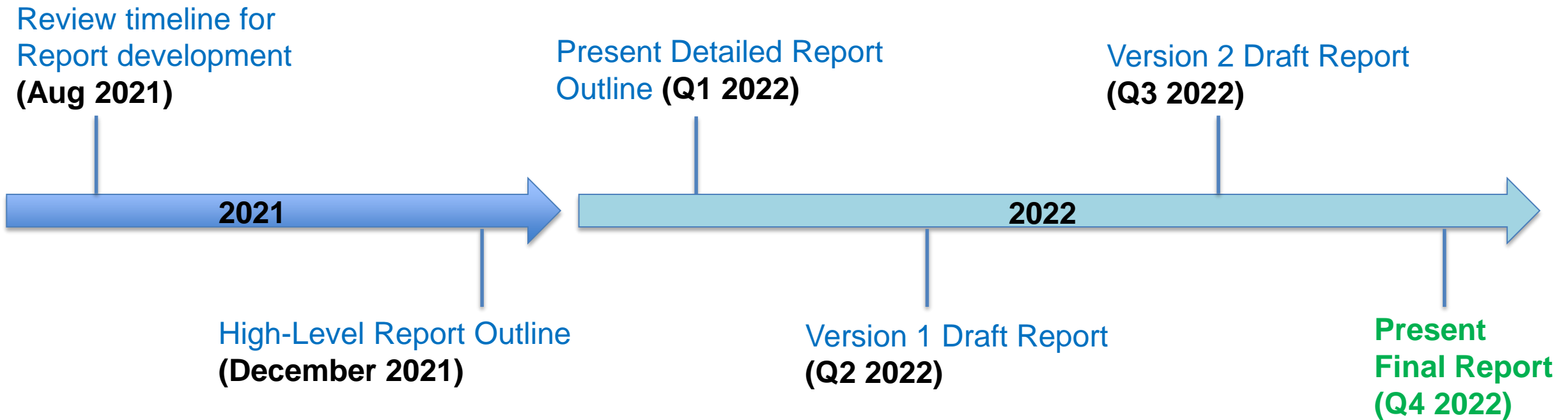
Commission Report

Senate Bill 955 Requirements

SB 955 states the Commission will publish a report at least **once every three years** that provides the following:

- An **overview of ongoing maintenance and improvements** made at the Dam and Dam complex;
- A **register of communications** received from State Agencies and other parties to the Commission;
- **Notice of upcoming plans** made by State Agencies for the Dam and Dam Complex; and
- An **overview of flood management projects on the Feather River** affecting public safety and flood risk reduction.

Commission Report Development Timeline



ITEM 3

SPILLWAY CAMERAS

Oroville Spillway WebCam

Oroville Citizen's
Advisory Commission

August 27, 2021

John Yarbrough



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Webcam view of Thermalito
Diversion Pool and Forebay
(in distance)



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Webcam view of
Lake Oroville



Webcam view of Lake Oroville
(looking toward Spillway Boat Ramp Cove)



ITEM 4
STATE WATER CONTRACTING AGENCY:
UTILIZATION OF STATE WATER PROJECT
IN CALIFORNIA

Valerie Pryor
General Manager
Zone 7 Water Agency



**ITEMS 5 & 6
DAM FACILITIES:
ASSET MANAGEMENT &
ANNUAL MAINTENANCE PLAN**

State Water Project Asset Management & Oroville Annual Maintenance & Projects

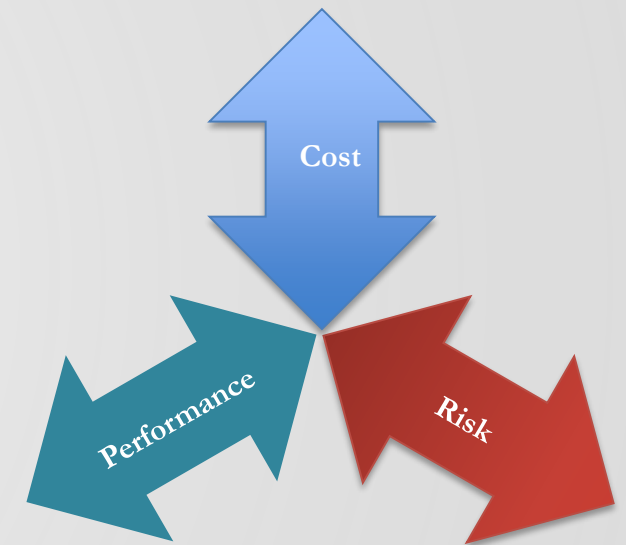
Oroville Citizens Advisory Commission Meeting
August 27, 2021

David Duval, Division Manager
Division of Operations and Maintenance



State Water Project Project Prioritization

- Project Prioritization is one component of DWR's Asset Management (AM) program
 - Builds upon other AM processes
 - Risk identification through inspections, condition assessments, and studies
 - Risk assessment for each proposed project using common matrix
 - Financial management and Resource planning
- Approach considers mandatory requirements, benefits, risk, and resources to find the right balance between performance, cost, and risk



Risk-Informed Prioritization

Why do we use risk to inform prioritization?

- To select a portfolio of projects that reduces the most risk in the least amount of time with the available funding and resources
- Public utilities often use risk, rather than other financial metrics such as (Net Present Value) NPV, to evaluate the priority and urgency of project and other actions
- Risk scoring assigns a quantitative value to the risk associated with an issue or event
- SWP has modeled its process after international standards (ISO 55001)



State Water Project Capital Prioritization Process



Prioritization Output

- Next year's Budget
- Multi-year Capital Plan



Historical Oroville Expenditures

Expense Type	CY2018	CY2019	CY2020
Annual O&M	42,700,565	47,187,723	46,218,162
Capital Projects	44,410,391	50,875,835	46,324,324
TOTAL	87,110,956	98,063,558	92,542,487

Note: Excludes costs for Oroville Spillways Emergency and Reconstruction



Planned Oroville Expenditures

Expense Type	CY2021	CY2022
Annual O&M	45,544,395	51,618,546
Capital Projects	53,898,106	62,049,756
TOTAL	99,442,500	113,668,302



Annual Operation & Maintenance Activities

HYATT POWERPLANT

- Unit Reliability Outage/CAP Inspection
- Unit Transformers Annual Maintenance
- Unit Annual Maintenance & Relay Testing
- Switchyard and Breaker Inspections
- Unit Runner Inspections and Repair
- Fire Systems Annual Inspection/Testing
- Station Service Annual Maintenance
- Battery/Charger Testing

THERMALITO POWERPLANT

- Unit Reliability Outage/CAP Inspection
- Unit Transformer Annual Maintenance
- Station Service Transformer Annual Maintenance
- Fire Systems Annual Inspection/Testing
- Unit Breaker Maintenance
- Bypass Gate Reliability Inspection
- Battery/Charger Testing

THERMALITO DIVERSION DAM POWERPLANT

- Unit Annual Outage/Inspection
- Radial Gate Full Open Testing
- Battery/Charger Testing

OROVILLE DAM/LAKE / THERMALITO FB/AB / OTHER LOCATIONS

- Flood Control Systems Annual Maintenance
- **DSOD/FERC Annual Inspections**
- Intake Shutter Annual Maintenance
- Fence Repair and Gate/Sign Maintenance
- Oroville Spillway Radial Gate Testing
- Roadway Maintenance
- Fish Hatchery Annual Maintenance
- Oroville Lake Debris Removal/Log Boom Maintenance
- **Dam Surveillance and Monitoring – DAILY**
- Water Flow and Temperature Monitoring – DAILY
- Water Quality Sampling
- Debris Removal/Erosion Repair – All Dams
- Vegetation Maintenance – All Dams
- Fuel Load Reduction

UPPER FEATHER RIVER DAMS/LAKES

- **DSOD Annual Inspections**
- Vegetation Maintenance – All Dams
- Debris Removal – All Dams
- Roadway Maintenance
- Debris Removal/Erosion Repair
- Precipitation Site Maintenance
- **Dam Surveillance and Monitoring**
- Two – Watermaster Areas
- Annual Snow Surveys



Capital Improvement Projects

- Power Canal Erosion Repair
- Diversion Dam Radial Gate Inspection and Repairs
- River Outlet Radial Gate Refurbishment
- Bidwell Dam Toe Weir Design/Construction/Installation
- RVOS Rehabilitation
- Hyatt Unit 1 Valve Refurbishment and Turbine Replacement
- Hyatt – Station Service Protective Relay Replacement
- Thermalito Powerplant Restoration Complete
- Hyatt Unit 4 Cooling System Replacement
- Hyatt Battery Charger Replacement
- Thermalito Diversion Dam Transmission Line Repair
- Fire Systems Modernization – Entire Field Division
- Physical Security Modernization
- Craig Access Road Bridge Replacements
- Loafer Creek Launch Ramps
- FERC Emergency Action Plan Functional Exercise
- Flood Control Outlet - Structural Re-analyses
- Flood Control Outlet Monolith 25 & 26 Piezometer Installation
- Oroville Dam Toe Piezometer Installation
- Core Block and Grout Gallery Piezometer Installation
- Palermo Tunnel Bulkhead Improvements
- Spillway Inspections – Flood Control Outlet , Thermalito Diversion Dam and Thermalito Powerplant Bypass Spillway
- Power Canal Headworks Concrete Repairs
- Oroville Comprehensive Needs Assessment Early Implementation – Parish Camp Saddle Dam Raise
- Oroville Comprehensive Needs Assessment Early Implementation – Palermo Canal Relining
- Hyatt Powerplant Reliability Study
- Feather River Paleoflood Investigation
- Hyatt Intake Structure and Penstock Inspections
- Non-destructive Examination Of Radial Gate Anchors
- Oroville Dam - High density LiDAR/deformation surveys



ITEM 7 PUBLIC COMMENT

**The Oroville Dam Citizens Advisory
Commission will now take public comment.**

We appreciate your input.

ITEM 8 ADJOURN

Thank you all for joining us today, our next Oroville Dam Citizens Advisory Commission meeting will be on December 3, 2021.